




ANDHRA LOYOLA INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi & Affiliated to JNTU Kakinada)

Accredited by NAAC & An ISO 9001:2015 Certified Institution

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FACULTY PROFILE

Name of the Faculty	Mrs. Madhu Sruthi Emani	
Designation	Assistant Professor	
Department	Mechanical Engineering	Date of Birth 04/11/1991
Date of Joining the Institution	29-01-2020	Native place Vijayawada, Krishna D.T Andhra Pradesh, India
Academic Qualification with Class/Grade	<ul style="list-style-type: none">• M. Tech Thermal Engineering first class with distinction from Indian Institute of Engineering Science and Technology Shibpur, West Bengal.• B. Tech Mechanical engineering first class with distinction from Bapatla Engineering College, Bapatla.	
Employee ID	ALIET-21-03	
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Total Experience in Years	2 years 6 months	
Papers Published in Journals -	7	

List of SCI EXTENDED/SCOPUS Publications

1. Madhu Sruthi Emani, Abhik Nayak, Achin Kumar Chowdhuri, Bijan Kumar Mandal, Sujoy Kumar Saha “Experimental Investigation On Heat Transfer Augmentation In Horizontal Tube Using Coiled Wire Inserts “ Journal of Enhanced Heat Transfer, vol 26, no. 5, 513–534, 2019.
2. Madhu Sruthi Emani, Hrishiraj Ranjan, Anand Kumar Bharti, Josua Petrus Meyer, Sujoy Kumar Saha,” Laminar flow heat transfer enhancement in square and rectangular channels having: (1) A wire-coil, axial and spiral corrugation combined with helical screw-tape with and without oblique teeth and a (2) spiral corrugation combined with twisted tapes with oblique teeth”, International Journal of Heat and Mass Transfer, vol 144, 118707, 2019. <https://doi.org/10.1016/j.ijheatmasstransfer.2019.118707>
3. Hrishiraj Ranjan, Anand Kumar Bharti, Madhu Sruthi Emani, Josua Petrus Meyer, Sujoy Kumar Saha, “New Combined Heat Transfer Enhancement Techniques Used in Laminar Flow Through Non-circular Ducts”, Applied Thermal Engineering, vol 163, 114325, 2019. <https://doi.org/10.1016/j.applthermaleng.2019.114325>

Other Publications

1. Madhu Sruthi Emani and Bijan Kumar Mandal, “The Use of Natural Refrigerants in Refrigeration and Air Conditioning Systems: A Review”, International Conference on Mechanical, Materials and Renewable Energy, IOP Conf. Series: Materials Science and Engineering, vol 377, 012064, 2018. doi:10.1088/1757-899X/377/1/012064
2. Madhu Sruthi Emani, Ranendra Roy and Bijan Kumar Mandal, Development of Refrigerants: A Brief Review, Indian Journal of Scientific Research, vol 14, no. 2, 175-181, 2017.
3. Ranendra Roy, Madhu Sruthi Emani, Bijan Kumar Mandal, “Numerical Simulation of Vapour Compression Refrigeration System Using Refrigerant R152a, R404a and R600a” Indian Journal of Scientific Research, vol 15, no. 2, 62-67, 2017.
4. Madhu Sruthi Emani, Ranendra Roy, Bijan Kumar Mandal, “Performance Evaluation of Alternative Refrigerants”, International Journal of Advance Research in Science and Engineering, vol 5, no. 08, 232 – 241, 2016.

Conferences

1. 12th International Conference on Thermal Engineering: theory and Applications (ICTEA 2019) organised by School of Technology, Pandit Deendayal Petroleum University, Gandhi Nagar, Gujarat, India in collaboration with Ryerson University, Toronto, Canada during February 23-26, 2019.
2. First International Conference on Mechanical Engineering (INCOM-2018) organised by Department of Mechanical Engineering, Jadavpur University, Kolkata, India, January 4-6, 2018.
3. International Conference on Contemporary Issues in Science, Engineering and Management (ICCI-SEM-2K17) organised by Gandhi Institute for Technology, Bhubaneswar during February 18-19, 2017.
4. Two Day International Conference on Recent Innovations in Engineering, Science, Humanities and Management (ICRIESHM-2016) organised by School of Engineering, Gayatri Vidya Parishad College for Degree & P.G. Courses, Rushikonda, Visakhapatnam, Andhra Pradesh during August 11-12, 2016.

Workshops

1. “Advanced Coal Utilisation: Current Status and Future Prospects”, Global Initiative for Academic Networks (Gian) under the Ministry of Human Resource Development organised at Indian Institute of Technology Kanpur during July 08-19, 2019.
2. “National Research Workshop on Energy Technologies” (sponsored by TEQIP-II) organised by Department of Mechanical Engineering, Indian Institute of Engineering Science and Technology Shibpur, West Bengal during January 12-13, 2017.
3. “National Workshop on Recent Advances in Automobile Engineering” (sponsored by TEQIP-II) organised by Department of Mechanical Engineering, Indian Institute of Engineering Science and Technology Shibpur, West Bengal on September 28, 2016.
5. Two-Day “Tribology Frontiers Workshop” (sponsored by TEQIP-II) organised by Department of Mechanical Engineering, Indian Institute of Engineering Science and Technology Shibpur, West Bengal during August 03-04, 2016.
6. Two Days National Workshop on Frontier Technologies in Mobility (sponsored by TEQIP-II) organised by MCKV Institute of Engineering, Liluah, West Bengal

List of Books Published

S. No	Title	Authors	Publication Details
1)	<i>Introduction to Enhanced Heat Transfer</i>	Sujoy Kumar Saha, Hrishiraj Ranjan, <u>Madhu Sruthi Emani</u> , Anand Kumar Bharti	Springer Briefs ISBN 978-3-030-20742-7, https://doi.org/10.1007/978-3-030-20740-3
2)	<i>Performance Evaluation Criteria in Heat Transfer Enhancement</i>	Sujoy Kumar Saha, Hrishiraj Ranjan, <u>Madhu Sruthi Emani</u> , Anand Kumar Bharti	Springer Briefs ISBN 978-3-030-20760-1, https://doi.org/10.1007/978-3-030-20758-8
3)	<i>Heat Transfer Enhancement in Plate and Fin Extended Surfaces</i>	Sujoy Kumar Saha, Hrishiraj Ranjan, <u>Madhu Sruthi Emani</u> , Anand Kumar Bharti	Springer Briefs ISBN 978-3-030-20738-0, https://doi.org/10.1007/978-3-030-20736-6
4)	<i>Heat Transfer Enhancement in Externally Finned Tubes and Internally Finned Tubes and Annuli</i>	Sujoy Kumar Saha, Hrishiraj Ranjan, <u>Madhu Sruthi Emani</u> , Anand Kumar Bharti	Springer Briefs ISBN 978-3-030-20747-2, https://doi.org/10.1007/978-3-030-20748-9
5)	<i>Insert Devices and Integral Roughness in Heat Transfer Enhancement</i>	Sujoy Kumar Saha, Hrishiraj Ranjan, <u>Madhu Sruthi Emani</u> , Anand Kumar Bharti	Springer Briefs ISBN 978-3-030-20775-5, https://doi.org/10.1007/978-3-030-20776-2
6)	<i>Electric Fields, Additives and Simultaneous Heat and Mass Transfer in Heat Transfer Enhancement</i>	Sujoy Kumar Saha, Hrishiraj Ranjan, <u>Madhu Sruthi Emani</u> , Anand Kumar Bharti	Springer Briefs ISBN : 978-3-030-20772-4, https://doi.org/10.1007/978-3-030-20773-1
7)	<i>Two-Phase Heat Transfer Enhancement,</i>	Sujoy Kumar Saha, Hrishiraj Ranjan, <u>Madhu Sruthi Emani</u> , Anand Kumar Bharti	Springer Briefs ISBN 978-3-030-20754-0, https://doi.org/10.1007/978-3-030-20755-7

Faculty Development Programs Attended

- 5-Day Faculty Development Programme on “*Enhancing Research Eco-system in the Campus*” organized by the Research & Development Cell, Malla Reddy Engineering College from 22nd to 26th August 2022.
- AICTE Recognized Faculty Development Programme on “*FEA using ANSYS*” Conducted by Mechanical Engineering Department from 26/09/2022 to 30/09/2022 (One Week) at Andhra Loyola Institute of Engineering & Technology